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CABLE CONNECTOR ASSEMBLY WITH STICKY FILM

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention generally relates to a cable connector assembly, and more particularly to a cable connector assembly used for power transmission.

2. Description of Related Art

Nowadays, cable connector assemblies are widely used in an electronic equipment, especially for transmitting power, and the performance of the cable connector assembly directly impacts on the entire electronic equipment whether can normally run.

CN patent No. 201130761Y issued to Tang on Oct. 8, 2008 discloses a cable connector assembly, the cable connector assembly comprises an insulated housing, a flexible printed circuit board, a LED element and a light transmission mem- 20 ber equipped on the flexible printed circuit board, and a cover enclosing the aforementioned elements. The flexible printed circuit board encloses the insulated housing, and the LED element is located on an outer side of the flexible printed circuit board, light from the LED element can pass through 25 the light transmission member. The insulated housing is received in the cover, there will be a gap between the insulated housing and the cover inevitably, the light from the LED element will be diffused around, and the light through the gap on a front end of the insulated housing will pass through a 30 receiving space of the cover, and the rest light passing through the light transmission member will be weaken, so it may be difficult for users to observe actual working status of the cable connector assembly.

Correspondingly, it is desired to have a cable connector ³⁵ assembly with improved shielding member to address the problems stated above.

BRIEF SUMMARY OF THE INVENTION

Accordingly, an object of the present invention is to provide a cable connector assembly having a sticky film to shield a gap between an insulative housing and a cover.

In order to achieve the above-mentioned object, a cable connector assembly in accordance with the present invention 45 comprises an insulative housing, a plurality of contacts received in the insulative housing, a cable electrically connected with the contacts, a light guiding member, a cover enclosing the insulative housing and the cable, a LED covered by the light guiding member and a pair of films located 50 between the LED and one side of the insulative housing. And the films are shielding a gap between the insulative housing and the cover.

Other objects, advantages and novel features of the invention will become more apparent from the following detailed 55 description of the present embodiment when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an assembled, perspective view of a cable connector assembly;

FIG. 2 is a partially exploded, perspective view of the cable connector assembly;

FIG. 3 is similar to FIG. 2, but viewed from another aspect; 65 FIG. 4 is another partially exploded, perspective view of the cable connector assembly shown in FIG. 1;

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FIG. 5 is an exploded, perspective view of the cable connector assembly shown in FIG. 1;

FIG. 6 is similar to FIG. 5, but viewed from another aspect; FIG. 7 is a partially exploded, perspective view of the cable connector assembly shown in FIG. 4; and

FIG. **8** is a partially assembled, perspective view of the cable connector assembly with a film bending when assembled in a cover.

DETAILED DESCRIPTION OF THE INVENTION

Reference will now be made to the drawing figures to describe the present invention in detail.

Referring to FIG. 1 and FIG. 5, a cable connector assembly 100 in accordance with the present invention comprises an insulative housing 2, a plurality of conductive contacts 3 assembled in the insulative housing 2, a linking member 4 electrically connected with the contacts 3, a flexible printed circuit board 5 with at least one Light Emitting Diode (LED) 55A, a light guiding member 6 partially enclosing the flexible printed circuit board 5, a cable 7 electrically connected with the linking member 4, a cover and a pair of films 9 stuck on a rear face 230 of the insulative housing 2. The cable 7 is enclosing by a metallic ring 81 and a strain relief member 82 to enhance the intensity thereof.

Referring to FIGS. 5-6, the cover includes a front cover 11, a contact cover 12 and a rear cover 13. The front cover 11 is made from conductive material and capable of being attracted by a complementary connector. The front cover 11 comprises a rectangular body portion 110 and a pair of legs 112 protruding rearwards from a back face of the body portion 110 along a mating direction. A cavity 1102 is recessed from a front surface of the body portion 110 along a front-to-back direction, and the cavity 1102 comprises a first cavity 1103 in a front end thereof for receiving the complementary connector and a second cavity 1104 in a back end thereof, the first cavity 1103 is smaller than the second cavity 1104 in size.

The contact cover 12 is of rectangular shape and made of insulative material, the contact cover 12 comprises a pair of first receiving channels 121, a pair of second receiving channels 122 located between the first receiving channels 121, and a third receiving channel 123 located between the second receiving channels 122. The first receiving channels 121 and the second receiving channels 122 have the same diameter with each other, and the third receiving channel 123 have smaller diameter than the first receiving channels 121.

Referring to FIGS. 2-3, the rear cover 13 is of sleeve shape, and defined an obturated end and another end with a hole 130 in axial direction. The rear cover 13 defines a sleeve receiving portion 132 along the axial direction and an opening 131 recessed from a front end thereof. The rear cover 13 is made from plastic material in the embodiment in accordance with the present invention, and also can be made of metallic material in other embodiments to enhance the intensity thereof. The rear cover 13 also has a pair of engaging holes 134 on top and bottom sides thereof, the engaging holes 134 are aligned with each other along a direction perpendicular to the mating direction.

Referring to FIGS. 5-6, the insulative housing 2 comprises a base portion 21 and a tongue portion 22 extending forwardly from the base portion 21, an enlarged portion 23 is arranged between the base portion 21 and the tongue portion 22. The insulative housing 2 defines two pairs of large-size first receiving passages 24 and a center small-size second receiving passage 25 respectively recessed from a front face thereof to a rear face thereof. The enlarged portion 23 defines a pair of first mounting holes 231 on both sides for receiving the legs